

CONTOUR BUFFER STRIPS

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 332



CONTOUR BUFFER STRIPS

Contour buffer strips are strips of perennial grass alternated with wider cultivated strips that are farmed on the contour

PRACTICE INFORMATION

The benefits of farming on the contour with the added protection from the grass strips make contour buffer strips an effective and cost efficient conservation practice.

Contour buffer strips slow runoff water and trap sediment. Consequently, soil erosion is generally reduced significantly by this practice. Sediments, nutrients, pesticides, and other potential pollutants are filtered out as water

flows through the grass strips. The grass strips also provide food and cover for wildlife.

The practice is not well suited for undulating terrain with steep irregular slopes where contouring is impractical.

The effectiveness of contour buffer strips is dependent on several variables such as steepness, soil type, crops grown, strip widths, management, and climatic factors

Standards and specifications containing minimum requirements, including maintenance, are included in the USDA/NRCS Field Office Technical Guide.

The following pages contain the conservation effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. Users are cautioned that these effects are estimates that may or may not apply to a specific site.

CONSERVATION PRACTICE PHYSICAL EFFECT WORKSHEET

NOTE: recorded in Microsoft word 6.0 - use tabs to change cells/fields

STATE	Iowa	FIELD OFFICE		DATE	12/5/96
PRACTICE: 332 Contour Buffer Strips			NOTES: These effects assum strips will be rotated every few years for soil improvemnt and maintenance		
RESOURCE: SOIL			Help Message: Click on form field for choice lists.		
RESOURCE CONCERN: EROSION			Tab key to move around. "N/A" is the default.		
RESOURCE INDICATORS			PHYSICAL EFFECTS		
SHEET AND RILL			significant reduction in sheet and rill erosion		
WIND			slight reduction in wind erosion		
EPHEMERAL GULLY			moderate reduction in ephemeral gully erosion		
CLASSIC GULLY			insignificant		
STREAMBANK			insignificant		
IRRIGATION INDUCED			N/A		
SOIL MASS MOVEMENT			insignificant		
ROADBANK/CONSTRUCTION			N/A		
OTHER					
RESOURCE CONCERN: SOIL CONDITION					
SOIL TILTH			moderate improvement in tilth		
SOIL COMPACTION			moderate reduction in soil compaction		
SOIL CONTAMINATION					
• SALTS			insignificant		
• ORGANICS			insignificant		
• FERTILIZERS			insignificant		
• PESTICIDES			N/A		
• OTHER					
DEPOSITION/DAMAGE					
• ONSITE			significant reduction/onsite deposition damage		
• OFFSITE			moderate decrease/offsite deposition damage		
DEPOSITION/SAFETY					
• ONSITE			significantly improve onsite safety/deposition		
• OFFSITE			moderately improve offsite safety hazard/depos.		
OTHER					
RESOURCE: WATER					
RESOURCE CONCERN: WATER QUANTITY					
SEEPS			moderate reduction in seepage hazard		
RUNOFF/FLOODING			sign. decrease in runoff/flooding		
EXCESS SUBSURFACE WATER			moderate increase in excess subsurface water		
INADEQUATE OUTLETS			slight improvement in H2O outlet concern		
WATER MGT. IRRIGATION					
• SURFACE			N/A		
• SPRINKLER			N/A		
WATER MGT. NON-IRRIGATED			moderate improvement in moisture use		
RESTRICTED FLOW CAPACITY					
• ONSITE			N/A		
• OFFSITE			N/A		
RESTRICTED STORAGE			sign. reduction in sedimentation of H2O storage		
OTHER					

RESOURCE: WATER	
RESOURCE CONCERN: WATER QUALITY	
RESOURCE	PHYSICAL EFFECTS
GROUNDWATER CONTAMINANTS	
• PESTICIDES	insignificant
• NUTRIENTS AND ORGANICS	insignificant
• SALINITY	insignificant
• HEAVY METALS	insignificant
• PATHOGENS	insignificant
• OTHER	
SURFACE WATER CONTAMINANTS	
• PESTICIDES	slight reduction in SWater contam./pesticides
• NUTRIENTS AND ORGANICS	slight reduction in SWater contam./nutr.,organics
• SUSPENDED SEDIMENTS	slight reduction in SWater contam./susp. sedi.
• LOW DESOLVED OXYGEN	slight reduction in SWater contam./low oxygen
• SALINITY	insignificant
• HEAVY METALS	insignificant
• WATER TEMPERATURE	insignificant
• PATHOGENS	slight decrease in SWater contam./pathegens
AQUATIC HABITAT SUITABILITY	slight improvement in Aqua. Hab. Suit.
OTHER	
RESOURCE: AIR	
RESOURCE CONCERN: AIR QUALITY	
AIRBORNE SEDIMENT AND SMOKE PARTICLES	
• ONSITE SAFETY	slight decrease in airborn sed.&smoke/safety
• OFFSITE SAFETY	slight decrease in airborn sed.&smoke part./safety
• ONSITE STRUCT. PROBLEMS	insignificant
• OFFSITE STRUCT. PROBLEMS	insignificant
• ONSITE HEALTH	insignificant
• OFFSITE HEALTH	insignificant
AIRBORNE SEDIMENT CAUSING CONVEYANCE PROBLEMS	slight decrease in airborn sediment/convey. prob.
AIRBORNE CHEMICAL DRIFT	slight decrease in airborn chem. drift
AIRBORNE ODORS	slight decrease in airbornodors
FUNGI, MOLDS, AND POLLEN	slight decrease in airborn fungi,molds,pollen
OTHER	
RESOURCE CONCERN: AIR CONDITION	
AIR TEMPERATURE	N/A
AIR MOVEMENT (windbreak effect)	slight improvement in air condition/ air movement
HUMIDITY	insignificant
OTHER	

[illegible]

RESOURCE: HUMAN	
RESOURCE CONCERN: SOCIAL CONSIDERATIONS	
RESOURCE INDICATORS	PHYSICAL EFFECTS
PUBLIC HEALTH AND SAFETY	insignificant
PRIVATE/PUBLIC VALUES	insignificant
CLIENT CHARACTERISTICS	N/A
RISK TOLERANCE	N/A
TENURE	N/A
OTHER	
RESOURCE CONCERN: CULTURAL CONSIDERATIONS	
ABSENCE/PRESENCE OF CULTURAL RESOURCES	insignificant
SIGNIFICANCE OF CULTURAL RESOURCES	insignificant
MITIGATION OF NEGATIVE CULTURAL RES. IMPACTS	insignificant
OTHER	